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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/748,027      | 12/30/2003  | Setsuhiro Saheki     | 1018.1200101        | 6516             |

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MINNEAPOLIS, MN 55403-2420

EXAMINER

BELLINGER, JASON R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3617

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/748,027

Applicant(s)

SAHEKI, SETSUHIRO

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1. ☐ Certified copies of the priority documents have been received.
  - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3-5, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinhardt in view of Garcia. Reinhardt shows a tire valve 10 having a nut 38 and a valve stem 12. The nut 38 is to mount the valve stem 12 to a wheel **Q** in a valve hole thereof. A grommet 42 is attached to the valve stem 12 to contact a wall of the valve hole to seal a tire when the valve stem 12 is mounted to the wheel **Q**. The grommet 42 elastically deforms into the valve hole between the valve stem 12 and the wall of the valve hole.

Reinhardt does not show the valve nut including a conical shoulder housing an o-ring on an inner wall of the nut. Garcia teaches the use of a nut 1 having a shoulder 18 formed along an inner wall at a lower end of the nut 1. The shoulder 18 has a lower end and an upper end, and the diameter of the upper end is greater than the diameter of the lower end so that the shoulder 18 is inclined from the lower end to the upper end.

An elastic body 16 is arranged in the shoulder 18. The elastic body 16 elastically deforms and enters a hole to form a seal between a stem 40 and the hole and between the stem 40 and the nut 1.

Garcia does not show an o-ring having an outer diameter that is greater than an inner diameter of the shoulder 18, being located in the shoulder 18. However, Garcia

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does show an o-ring 30 having a diameter greater than the inner diameter of the inner shoulder of the shoulder 18. One of ordinary skill in the art at the time of the invention would have found it obvious to use a second o-ring in the shoulder 18, as a substitute of equivalent sealing rings, dependent upon availability and cost. The o-ring 30, when placed in the shoulder 18, would act in the same manner as seal 16. The nut 1 includes a threaded portion that is separated from the shoulder 18.

Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the sealing nut taught by Garcia in place of the nut 38 and washer 40 of Reinhardt as a substitution of equivalent fastening means, and to provide further sealing means to the tire valve of Reinhardt. The nut and elastic member of Garcia would then contact the wheel of Reinhardt when securing the tire valve to the wheel.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reinhardt in view of Garcia as applied to claims 1, 3-5, and 8-10 above, and further in view of Martin. Reinhardt as modified by Garcia does not show a transmitter attached to the tire valve.

As shown in figure 1, Martin teaches the use of a transmitter 12 with a tire valve 16 to measure the condition of the tire, generating and transmitting that data to the vehicle user. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the tire valve of Reinhardt as modified by Garcia with a transmitter for the purpose of monitoring the air pressure

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inside the tire during operation, thus allowing the user to increase or decrease the air pressure of the tire when needed.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 3-6, and 8-10 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show fastening nuts having conical shaped shoulders for receiving sealing members. For example, Berecz shows a nut of the type described above.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

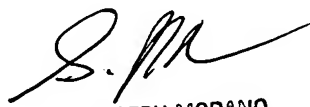
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger  
Examiner  
Art Unit 3617



jrb



S. JOSEPH MORANO  
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